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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	R	ATTORNEY DOCKET NO.
09/057,036	04/08/98	KENNEDY		

LM02/1021

BAKER & BOTTS
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JONES, EXAMINER

ART. UNIT	PAPER NUMBER
	4

10/21/98

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/057,036	Applicant(s) Kennedy
Examiner Hugh Jones	Group Art Unit 2763



Responsive to communication(s) filed on Apr 8, 1998

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 41-59 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 41-59 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 1

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors (there are a number of minor grammatical errors). Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 49 and 53-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 49 recites the limitation "...wide variety of resource models..." in . There is insufficient antecedent basis for this limitation in the claim. Claim 53 (and thus, dependent claims 54-56) recites the limitation "...and the resource models as nodes..." in claim 53. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible

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harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 41, 42, 45, 47, 51, 53-54 (assuming the 112 problems are solved), and 57-59 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over patented claims 1, 1, 11, 12, 37, 39, 39, 1, 1, and 1, of U.S. Patent No. 5,764,543. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

6. Although claims 41, 53, and 57 do not address the limitations concerning “resource models” and “extension selector fields” (and claims 42, 54, and 58 do not address “extension selector fields”) which are present in patented claims 1, 39, and 1, claims 41-42, 45, 47, 51, 53, 54, 57, 58, and 59 are fully disclosed by patented claims 1, 1, 11, 12, 37, 39, 39, 1, 1, and 1, respectively. The absence of the limitation concerning the “resource model” in claims 41 and 53 is not a negative limitation (this holds also true as regards the absence of “extension selector fields” in claims 42 and 54). In fact, a “resource model” would appear to be obvious in the process model. Since the disclosure is directed towards modeling a real manufacturing environment with a process model (and plan), it would be expected that such things [the art made of record (below)

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clearly shows this] as activities (machining, for example), resources (machines, materials), storage (or supply or inventory) and routing would be taken into account. The resources must be accounted for in some manner (even if it is not a resource model in the same fashion as the operation and buffer models). It would be expected that if the resources were to be taken into account as they should, they would be handled in the same manner as the operations and buffers; that is to say, a resource model would be expected.

7. As per claims 57-59, these are a method version of the patented system claim 1. The main difference appears to be in the defining of the models; however, this is inherent in claim 1 (the models must be defined before they can be used [in fact, there appears to be no difference, for example, between "...defining a plurality of operation models from an operation model type..." (Claim 57) and "...a plurality of operation models defined from an operation model type... (patented claim 1)].

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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9. Claims 43, 44, 46, 48, 50, and 55-56 are rejected under 35 U.S.C. 101 as claiming the same invention as that of patented claims 1, 13, 23, 24, 25, 39, 40, respectively, of prior U.S. Patent No. 5,764,543. This is a double patenting rejection.

Allowable Subject Matter

10. Claim 52 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The use of dates to turn on or off objects is not new. However, the examiner is not aware of any instance where this limitation is used in combination with the base and intervening claims (note the prior art made of record and not relied upon).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These citations demonstrate that there is art in the area disclosed by the applicant; in particular, as pertains to the use of object oriented languages for process control. However, the configuration (specifically, the object classes appear to be unique, especially the "buffer" class; in addition, the ability to develop plans [actualizations] from the models [a diagram of all possibilities] appears to be well developed [although this is hinted at in Hirsch (below)]), as disclosed in the application, has not been found in the art.

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(1) Bristol (U. S. Patent 5,247,693, *Computer Language Structure for Process Control Applications and Method of Translating Same into Program Code to Operate the Computer*, 1993) discloses a language structure and translator specifically adapted for use in constructing computer programs for controlling chemical and physical processing. The use of object oriented programming for this purpose is also disclosed. See especially figs. 1C, 2, 8, 12; and *Summary of the Invention*.

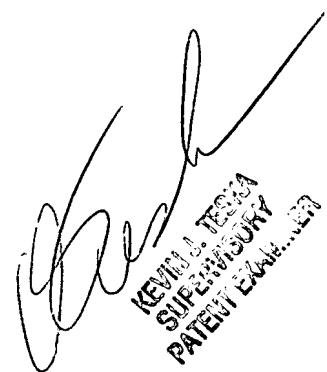
(2) Onarheim et al. (U. S. Patent 5,168,441, *Methods for Set Up and Programming of Machine and Process Controllers*, 1992) discloses the use of Smalltalk, an object-oriented programming language for process control. See especially figs. 2, 3, 5.

(3) Hirsch et al. (U. S. Patent 5,586,039, *Computer-Aided Manufacturing Support Method and System for Specifying Relationships for Dependencies Between Process Type Components*, 1996) discloses a method and system, for use with a computer integrated manufacturing system, to classify and serve as the data and information repository for a process or product specification and to classify groups of process resources. See especially cols. 1-3; col. 4, lines 57-67; and cols. 5-6. Hirsch et al. also disclose the use of Smalltalk.

(4) Tantry et al. (U. S. Patent 5,398,336, *Object-Oriented Architecture for Factory Floor Management*, 1995) discloses an object-oriented architecture for a factory floor management software system wherein factory floor entities are modeled as factory objects within a relational database. Note especially figs. 3-4; table 1; and cols. 2-8.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Hugh Jones whose telephone number is (703) 305-0023.



KEVIN J. TEGNA
SUPERVISORY
PATENT EXAMINER

Dr. Hugh Jones

October 12, 1998